REMARKS

Initially, Applicant notes that the remarks and amendments made in this response are consistent with those presented to the Examiner during the telephone call of May 29, 2007.

The Non-Final Office Action, mailed May 4, 2007, considered and rejected claims 1-53.[1] By this paper, claims 1, 15-16, 18-19, 21, 35, 40, and 50 have been amended and no claims have been canceled or added such that claims 1-53 remain pending.[2] Claims 1 and 50 are the only independent claims at issue.

Initially, with regard to the §101 and §112, it will noted that independent claim 50 has been amended to clarify the subject matter being claimed. The claim, as amended, now clearly recites the limitations of a computer readable storage media, storing instructions that when executed implement a specific method. In view of the current amendments to claim 50, Applicant respectfully submits that the §101 and §112 directed to the computer program product of claims 50-53 are now moot.

Applicant's claimed invention is generally directed to embodiments for optimizing the offload of network computing tasks by providing for reliably offloading uploading multiple network connections or state objects between a host processor and a destination component processor. The embodiment of claim 1, for example, recites a method in a computerized system comprising a switching layer, and a sequence of one or more intermediate software layers of a network protocol stack, each of the intermediate software layers having a state object. The

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[1] Claims 50-53 were rejected under 35 U.S.C. §101 because the claimed invention is purportedly directed to non-statutory subject matter. Claims 50-53 were further rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-5, 8, 40-43, 45-47, 50 and 51 were rejected under 35 U.S.C. § 102(b) as being anticipated by Boucher et al. US Patent No. 6,334,153, hereinafter Boucher. Claims 6 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boucher et al. US Patent No. 6,334,153 in view of Dwork et al. US Patent No. 6,963,946. Claims 9-14, 48, 49, 52 and 53 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boucher et al. US Patent No. 6,334,153 in view of Anand et al. US Patent No. 6,370,599. Claims 15-19 and 44 were rejected under 35 U.S.C. 103(a) as being unpatentable over Boucher et al. US Patent No. 6,334,153 in view of Dwork et al. US Patent No. 6,963,946. Claim 20 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Boucher et al. US Patent No. 6,334,153 in view of Dwork et al. US Patent No. 6,963,946 as applied to claims 15-19 above, and further in view of Anand et al. US Patent No. 6,370,599. Claims 35-38 were rejected under 35 U.S.C. 103(a) as being unpatentable over Boucher et al. US Patent No. 6,334,153 in view of Anand et al. US Patent No. 6,370,599. Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

[2] Support for the amendments is found throughout the specifications including, but not limited to, the disclosure of pgs. 12, 18,

method is directed to transferring control between one or more destination component devices and one or more source component devices. The control is needed to process a plurality of state objects while still maintaining integrity of established network communication. The method comprises the act of generating an offload data structure that comprises a hierarchy of a plurality of state objects, wherein the hierarchy corresponds to a plurality of connections sharing a common path state object, the plurality of state objects also correspond to a network protocol state for one or more intermediate software layers. Two or more state objects in the same intermediate software layer of the offload data structure are transferred from a source component device to a destination component device. The destination component then processes the two or more state objects at the same protocol layer after the transfer.

The only other independent claim, 50, is directed to a computer program product that when executed, performs the method of claim 1.

With specific regard to the substantive rejections of record, it will be noted that independent claims 1 and 50 were rejected by in view of a single reference, Boucher. Boucher discloses embodiments for accelerating the processing network communications by creating a fast data path that effectively bypasses network layers and accesses message data directly without processing the headers for each network layer. The fast path of Boucher creates a data structure for individual connections that includes the information that would normally be present in the headers of each for each network layer. The headers can then be extracted or added without having each layer process the packet resulting in less processing overhead. It will be noted that Boucher discloses only using the fast path to process large multi-packet messages and is not directed to optimizing the offloaded connections by efficiently offloading multiple connections or states together.

Boucher fails to teach or suggest all of the limitations present within independent claims 1 and 50. For instance, Boucher fails to address, at least, the limitation of an act of generating an offload data structure, the offload data structure comprising a hierarchy of a plurality of state objects, the hierarchy corresponding to a plurality of connections sharing a common path state object, the plurality of state objects corresponding to a network protocol state for one or more intermediate software layers. It will also be appreciated that Boucher cannot teach this limitation because Boucher does not address offloading multiple state objects or connections at the same

time. Boucher is only addressed to offloading large multi-packet connections. The Examiner relies on the disclosure of a communications control block (CCB) within Boucher as teaching the offload data structure. However, this cited disclosure of Boucher specifically states that the CCB describes a particular (single) connection. (see clm. 5, ll. 36-43). The data structure defined in claim 1, on the other hand, consists of a **plurality of network connections**. By transferring control using the hierarchical structure, the current invention is able to take advantage of the offload even when the individual connections alone, would not be candidates to offload. The disclosure of Boucher does not contemplate offloading multiple connections and states throughout the application that only large connections are suitable for offload and discloses that each connection is checked to determine if it is a candidate for a fast path.

Furthermore, Boucher does not teach the limitation of an act of concurrently transferring from a source component device to a destination component device two or more state objects in the same intermediate software layer of the offload data structure. While Boucher describes sending an object from the source to work its way through the destination, Boucher fails to teach or suggest that multiple state objects are being transferred together. Again, as discussed above, Boucher does not disclose any limitations similar to this because Boucher is only processing individual connections that are of a suitable size to offload individually. The present embodiment of claim 1, however, enables multiple connections to be offloaded by combining them in an efficient manner. Therefore, the present embodiment of the invention allows the offload of connections that Boucher would fail to offload because it would be inefficient to do so.

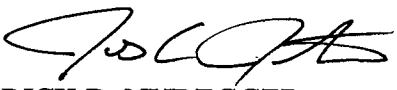
The other cited art of record also fails to compensate for the foregoing inadequacies of Boucher. Accordingly, in view of the foregoing, Applicant respectfully submits that all of the independent claims are allowable, such that all of the other rejections to the claims (including the dependent claims) are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied

on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at 801-533-9800.

Dated this 3rd day of August, 2007.

Respectfully submitted,



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